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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Brian Benicewicz and Eui Won Choe

Application No.: 10/530,002

Group Art Unit: 1745

371(c)/Filed: August 22, 2005

Examiner: Not yet assigned

Confirmation No.: 5331

Title: Proton Conducting Polymer Membrane Comprising Phosphonic Acid Groups  
Containing Polyazoles and the use Thereof in Fuel Cells

CERTIFICATE OF MAILING OR TRANSMISSION	
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Typed or printed name of person signing certificate	

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

☐ under 37 CFR 1.129(a), or

(First/Second submission after Final Rejection)

☒ under 37 CFR 1.97(b), or

(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

☐ under 37 CFR 1.97(c) together with either:

☐ a Statement under 37 CFR 1.97(e), as checked below, or

☐ a \$180.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

☐ under 37 CFR 1.97(d) together with:

☐ a Statement under 37 CFR 1.97(e), as checked below, and

☐ a \$180.00 fee under 37 CFR 1.17(p), or

(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

☐ under 37 CFR 1.97(i):

Applicant requests that the IDS and cited reference(s) be placed in the application file.

(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited references are enclosed. [AN-AL5 and AU-AW]
- ☐ Copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
- ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☒ The "concise explanation" requirement (non-English references) for reference(s) [AN-AQ, AP2, AM3-AP3 and AL4-AL5] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
- ☐ the explanation provided in the Specification.
- ☐ submission of the enclosed International Search Report.
- ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
- ☒ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_  
Examiner

\_\_\_\_\_  
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed, except any application filed on or after June 30, 2003, which has been scanned into the PTO's Image File Wrapper (IFW) system and is available to the examiner.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[ ]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

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Dated:

2/10/06

PTO-1449 REPRODUCED

ATTORNEY DOCKET NO.  
3799.1011-000APPLICATION NO.  
10/530,002SUPPLEMENTAL INFORMATION DISCLOSURE  
CITATION IN AN APPLICATIONFIRST NAMED INVENTOR  
Oemer Uensal371(c)/FILING DATE  
August 22, 2005

February 10, 2006

(Use several sheets if necessary)

EXAMINER  
Not assignedCONFIRMATION NO.  
5331GROUP  
1745

FEB 14 2006

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	AB	3,313,783	04-11-1967	Iwakura, <i>et al.</i>
	AC	3,224,908	12-21-1965	Duch <i>et al.</i>
	AD	3,293,088	12-20-1966	Herbst <i>et al.</i>
	AE	3,737,045	06-05-1973	Hasimoto <i>et al.</i>
	AF	3,808,305	04-30-1974	Gregor
	AG	4,012,303	03-15-1977	D'Agostino <i>et al.</i>
	AH	4,075,093	02-21-1978	Walch <i>et al.</i>
	AI	4,187,333	02-05-1980	Rembaum <i>et al.</i>
	AJ	4,537,668	08-27-1985	Gaussens <i>et al.</i>
	AK	4,622,276	11-11-1986	Walsh
	AA2	4,634,530	01-06-1987	Kuder <i>et al.</i>
	AB2	5,098,985	03-24-1992	Harris, <i>et al.</i>
	AC2	5,211,984	05-18-1993	Wilson
	AD2	5,218,076	06-08-1993	Madison, <i>et al.</i>
	AE2	5,312,895	05-17-1994	Dang, <i>et al.</i>
	AF2	5,492,996	02-20-1996	Dang, <i>et al.</i>
	AG2	5,633,337	05-27-1997	Tan, <i>et al.</i>
	AH2	5,643,968	07-01-1997	Andreola <i>et al.</i>
	AI2	5,656,386	08-12-1997	Scherer <i>et al.</i>
	AJ2	5,674,969	10-07-1997	Sikkema, <i>et al.</i>
	AK2	6,030,718	02-20-2000	Fuglevand <i>et al.</i>
	AA3	6,087,032	07-11-2000	Yoshitake <i>et al.</i>
	AB3	6,096,369	08-01-2000	Anders <i>et al.</i>
	AC3	6,110,616	08-29-2000	Sheikh-Ali <i>et al.</i>
	AD3	6,197,147 B1	04-06-2001	Bönsel <i>et al.</i>
	AE3	6,248,469 B1	06-19-2001	Formato <i>et al.</i>

EXAMINER

DATE CONSIDERED

PTO-1449 REPRODUCED  <b>SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <b>February 10, 2006</b>  (Use several sheets if necessary)	ATTORNEY DOCKET NO. 3799.1011-000	APPLICATION NO. 10/530,002	
	FIRST NAMED INVENTOR Oemer Uensal		371(c)/FILING DATE August 22, 2005
	EXAMINER Not assigned	CONFIRMATION NO. 5331	GROUP 1745

U.S. PATENT DOCUMENTS				
EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER Number-Kind Code (if known)	ISSUE DATE / PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT
	AF3	6,368,587 B1	04-09-2002	Anders et al.
	AG3	US2001/0038937 A1	11-08-2001	Suzuki et al.
	AH3	US2002/0045085 A1	04-18-2002	Formato et al.
	AI3	US2004/010731 A1	05-27-2004	Jakoby, <i>et al.</i>

FOREIGN PATENT DOCUMENTS					
		DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO
	AN	DE 101 48 131 A1	05-08-2003	GKSS-Forschungszentrum Geesthacht GmbH	
	AO	DE 196 53 484 A 1	06-25-1998	Fraunhofer Ges Foerderung Angewandten	
	AP	EP 0 846 733 A2	06-10-1998	Daimler-Benz Aktiengesellschaft (DE)	
	AQ	EP 0 893 165 A2	01-27-1999	Huels Chemische Werke AG	
	AL2	EP 1 110 992 A1	06-27-2001	Kabushiki Kaisha Toyota Chuo	
	AM2	EP 1 202 365 A1	05-02-2002	Center for Advanced Science and Technology Incubation, Ltd.	
	AN2	WO 99/10165	03-04-1999	Foster-Miller, Inc. (US)	
	AO2	WO 00/49069	08-24-2000	Mikael Paronen	
	AP2	WO 00/54351	09-14-2000	Center for Advanced Science and Technology Incubation, Ltd.	
	AQ2	WO 01/45192 A1	06-21-2001	Proton Energy Systems, Inc.	
	AL3	WO 01/94450 A2	12-13-2001	SRI International and Polyfuel, Inc.	
	AM3	WO 03/022412 A2 & A3	03-20-2003	Celanese Ventures GmbH	
	AN3	JP 53-97988	08-26-1978	Toyo Soda Mfg Co Ltd	
	AO3	JP 2002146014	05-22-2002	Toyo Boseki	
	AP3	JP 2003022709	01-24-2003	Toyo Boseki	
	AQ3	EPO 0 476 560 A1	03-25-1992	The Dow Chemical Company	

EXAMINER	DATE CONSIDERED
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PTO-1449 REPRODUCED  <b>SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <b>February 10, 2006</b>  (Use several sheets if necessary)	ATTORNEY DOCKET NO. 3799.1011-000	APPLICATION NO. 10/530,002	
	FIRST NAMED INVENTOR Oemer Uensal		371(c)/FILING DATE August 22, 2005
	EXAMINER Not assigned	CONFIRMATION NO. 5331	GROUP 1745

FOREIGN PATENT DOCUMENTS						
		DOCUMENT NUMBER Country Code-Number-Kind Code (if known)	DATE MM-DD-YYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	TRANSLATION YES NO	
	AL4	WO 02/071518 A1	09-12-2002	Celanese Ventures GMBH		
	AM4	WO 02/081547 A1	10-17-2002	Celanese Ventures GMBH		
	AN4	WO 02/088219 A1	11-07-2002	Celanese Ventures GMBH		
	AO4	WO 02/102881 A1	12-27-2002	Celanese Ventures GMBH		
	AP4	WO 02/36249 A1	05-10-2002	Celanese Ventures GMBH		
	AQ4	WO 03/007411 A2	01-23-2003	Muller, <i>et al.</i>		
	AL5	WO 03/022412 A2	03-20-2003	Celanese Ventures GMBH		

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
AU	Y. Sakaguchi, <i>et al.</i> , "Preparation and Properties of Sulfonated or Phosphonated Polybenzimidazoles and Polybenzoxazoles," <i>Am. Chem. Soc., Polymeric Materials Science and Engineering</i> , 84: 899-900 (2001)	
AV	Spry, R. J., <i>et al.</i> "Anisotropic Ionic Conductivity of Lithium-Doped Sulfonated PBI, <i>J. Of Polymer Sci.: Part B: Polymer Physics</i> , 35: 2925-2933 (1997)	
AW	Osaheni, J. A. and Jenekhe, S. A., "Synthesis and Processing of Heterocyclic Polymers as Electronic, Optoelectronic, and Nonlinear Optical Materials. 4. New Conjugated Rigid-Rod Poly(benzobis(imidazole))s," <i>Macromolecules</i> 28:1172-1179 (1995).	

EXAMINER	DATE CONSIDERED
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